AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. – 6. (Cancelled)

7. (Currently Amended) A network interface for processing an incoming message sent by a client device to a server, comprising:

a First-In-First-Out (FIFO) buffer adapted to receive the incoming message and to assemble the incoming message from a serial to a parallel form;

a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming message from a serial to a parallel form, recognize a Hypertext Transfer Protocol (HTTP) message header embedded in the incoming message, parse the recognized HTTP message header into a parsed HTTP message header, provide the parsed HTTP message header in a compact form to a CPU and memory in the server, and provide to the CPU and memory in the server the incoming message that cannot be recognized by the regular-expression pattern matching circuit, wherein:

the HTTP message header includes a HTTP cookie, and

the regular-expression pattern matching circuit is implemented by a technique selected from the group consisting of hardware, software, and a combination thereof; and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized HTTP message header.

8. – 12. (Cancelled)

13. (Currently Amended) A server for providing services to a client device, comprising:

a central processing unit (CPU);

a bus connected to the CPU;

a memory connected to the bus, the memory having a server application program stored therein; and

a network interface for processing an incoming ~~messages~~ message sent by the client device to the server, the network interface including:

a First-In-First-Out (FIFO) buffer adapted to receive the incoming ~~messages~~ message and to assemble the incoming ~~messages~~ message from a serial to a parallel form,

a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming ~~messages~~ message from a serial to a parallel form, recognize a Hypertext Transfer Protocol (HTTP) message ~~headers~~ header embedded in the incoming ~~messages~~ message, parse the recognized HTTP message ~~headers~~ header into a parsed HTTP message ~~headers~~ header, provide the parsed HTTP message ~~headers~~ header in a compact form to the CPU and the memory, and provide to the CPU and the memory any incoming ~~messages~~ message that cannot be recognized by the regular-expression pattern matching circuit, wherein:

the HTTP message ~~headers include~~ header includes an HTTP ~~cookies~~ cookie, and

the regular-expression pattern matching circuit is implemented by a technique selected from the group consisting of hardware, software, and a combination thereof, and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on [[a]] content of the recognized HTTP message ~~headers~~ header.

14. – 18. (Cancelled)

19. (Currently Amended) A communications network comprising:

a client device; and

a server connected to the client device for providing services to the client device, the server including:

a central processing unit (CPU),

a bus connected to the CPU,

a memory connected to the bus, the memory having a server application program stored therein, and

a network interface for processing an incoming ~~messages~~ message by the client device to the server, the network interface including:

a First-In-First-Out (FIFO) buffer adapted to receive the incoming ~~messages~~ message and to assemble the incoming ~~messages~~ message from a serial to a parallel form,

a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming ~~messages~~ message from a serial to a parallel form, recognize a Hypertext Transfer Protocol (HTTP) message ~~headers~~ header embedded in the incoming ~~messages~~ message, parse the recognized HTTP message ~~headers~~ header into a parsed HTTP message ~~headers~~ header, provide the parsed HTTP message ~~headers~~ header in a compact form to the CPU and the memory, and provide to the CPU and the memory any incoming ~~messages~~ message that cannot be recognized by the regular-expression pattern matching circuit, wherein:

the HTTP message ~~headers include~~ header includes an HTTP ~~cookies~~ cookie, and

the regular-expression pattern matching circuit is implemented by a technique selected from the group consisting of hardware, software, and a combination thereof, and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized HTTP message ~~headers~~ header.

20. (Currently Amended) A method for processing an incoming message sent by a client device to a server, comprising:

receiving the incoming message using a First-In-First-Out (FIFO) buffer;

assembling the incoming message from a serial to a parallel form using the FIFO buffer; and

concurrent with the assembling of the incoming message from a serial to a parallel form:

recognizing a Hypertext Transfer Protocol (HTTP) message header embedded in the incoming message received by the FIFO buffer using a regular-expression pattern matching circuit,

parsing the recognized HTTP message header into a parsed HTTP message header using the regular-expression pattern matching circuit, [[and]] wherein the HTTP message header includes a HTTP cookie;

providing the parsed HTTP message header in a compact form to a CPU and a memory in the server;

providing a response message to the client device based on a content of the recognized HTTP message header;

providing to the server any incoming message that cannot be recognized by the regular-expression pattern matching circuit.

21. – 25. (Cancelled)